



Image may differ from product. See technical specification for details.

# 11206 TN9

#### Self-aligning ball bearing with extended inner ring

Self-aligning ball bearings, with extended inner ring, have two rows of balls, a common sphered raceway in the outer ring and two deep uninterrupted raceway grooves in the inner ring. They are insensitive to angular misalignment of the shaft relative to the housing. The

extended inner ring enables use of commercial grade shafting and axially location on the shaft by means of a slot at one end of the inner ring.

- Accommodate static and dynamic misalignment
- Excellent high-speed performance
- Excellent light load performance
- Low friction
- Extended inner ring facilitates ease of mounting

### **Overview**

### **Dimensions**

Bore diameter	30 mm
Outside diameter	62 mm
Width	48 mm

### Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	4.65 kN
Reference speed	17 000 r/min
Limiting speed	6 700 r/min

## **Properties**

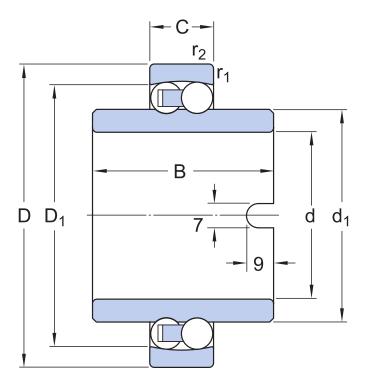
Retaining feature, inner ring	Locating slot
Locating feature, bearing outer ring	None
Number of rows	2
Bore type	Cylindrical
Cage	Non-metallic
Radial internal clearance	CN
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

## Logistics

Product net weight	0.35 kg
eClass code	23-05-08-06
UNSPSC code	31171532

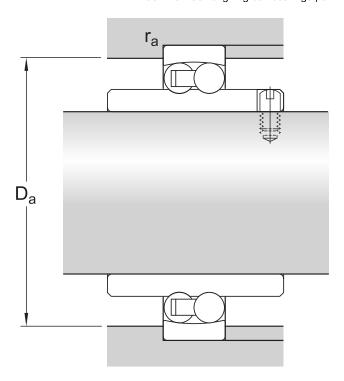
## **Technical specification**

Bore type Cylindrical



## **Dimensions**

d	30 mm	Bore diameter
D	62 mm	Outside diameter
В	48 mm	Width
С	16 mm	Width outer ring
$d_1$	≈ 40.1 mm	Shoulder diameter inner ring
$D_1$	≈ 51.9 mm	Shoulder diameter outer ring
r <sub>1,2</sub>	min. 1 mm	Chamfer dimension



## **Abutment dimensions**

$D_a$	max. 56.4 mm	Abutment diameter housing
r <sub>a</sub>	max. 1 mm	Fillet radius

### Calculation data

Basic dynamic load rating	С	15.6 kN
Basic static load rating	$C_0$	4.65 kN
Fatigue load limit	$P_{\rm u}$	0.24 kN
Limiting speed		6 700 r/min
Permissible angular misalignment	α	2.5 °
Calculation factor	k <sub>r</sub>	0.04
Limiting value	е	0.25
Calculation factor	Y <sub>0</sub>	2.5
Calculation factor	$Y_1$	2.5
Calculation factor	Y <sub>2</sub>	3.9

### Tolerances and clearances

#### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, JS7
- Radial internal clearance: table

#### **BEARING INTERFACES**

- Seat tolerances for standard conditions
- Tolerances and resultant fits

## **More Information**

Product details	Engineering information	Tools
Designs and variants		SKF Product select - Select and
General bearing specifications	Principles of rolling bearing selection	evaluate bearing
Loads	General bearing knowledge	SKF Product select - Combine housing with bearing
Temperature limits	Bearing selection process	SimPro Quick
Permissible speed	Bearing interfaces	LubeSelect for SKF greases
Design considerations	Seat tolerances for standard conditions	Heater selection tool
Mounting	Selecting internal clearance	Drive-up Method Program
Designation system	Lubrication	Oil Injection Method Program
	Sealing, mounting and dismounting	Tool and Accessory Selector for sleeves
	Bearing failure and how to prevent it	and shafts



## Terms of use

By accessing and using this website / app owned and published by AB SKF (publ.) (556007-3495 · Gothenburg) ("SKF"), you agree to the following terms and conditions:

#### Warranty Disclaimer and Limitation of Liability

Although every care has been taken to assure the accuracy of the information on this website / app, SKF provides this information "AS IS" and DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. You acknowledge that your use of this website / app is at your sole risk, that you assume full responsibility for all costs associated with use of this website / app, and that SKF shall not be liable for any direct, incidental, consequential, or indirect damages of any kind arising out of your access to, or use of the information or software made available on this website / app.

Any warranties and representations in this website / app for SKF products or services that you purchase or use will be subject to the agreed upon terms and conditions in the contract for such product or service.

Further, for non-SKF websites / apps that are referenced in our website / app or where a hyperlink appears, SKF makes no warranties concerning the accuracy or reliability of the information in these websites / apps and assumes no responsibility for material created or published by third parties contained therein. In addition, SKF does not warrant that this website / app or these other linked websites / apps are free from viruses or other harmful elements.

#### **Third Party Services**

When viewing YouTube content via the SKF website(s) (i.e. using YouTube API Services), you agree to be bound by the YouTube Terms of Service.

#### Copyright

Copyright in this website / app copyright of the information and software made available on this website / app rest with SKF or its licensors. All rights are reserved. All licensed material will reference the licensor that has granted SKF the right to use the material. The information and software made available on this website / app may not be reproduced, duplicated, copied, transferred, distributed, stored, modified, downloaded or otherwise exploited for any commercial use without the prior written approval of SKF. However, it may be reproduced, stored and downloaded for use by individuals without prior written approval of SKF. Under no circumstances may this information or software be supplied to third parties.

This website /app includes certain images used under license from Shutterstock, Inc.

#### Trademarks and Patents

All trademarks, brand names, and corporate logos displayed on the website / app are the property of SKF or its licensors, and may not be used in any way without prior written approval by SKF. All licensed trademarks published on this website / app reference the licensor that has granted SKF the right to use the trademark. Access to this website / app does not grant to the user any license under any patents owned by or licensed to SKF.

#### Changes

SKF reserves the right to make changes or additions to this website / app at any time.